



Letter to the Editor

Closure of the spheno-occipital suture of skull: Anatomical and forensic considerations

Another stupendous article entitled 'Age-at-death estimation based on the macroscopic examination of spheno-occipital sutures' by Akhlaghi et al.¹ was published in the recent issue of the journal which generates much interest.¹ According to the authors, the main aim of the study was to observe the closure degree of spheno-occipital synchondrosis and its relationship to chronological age.¹ The authors need to be applauded for their brilliant effort in collecting a mammoth sample size of 376 cadavers over a span of two years.

The authors describe that the study was carried out by 'unique examiners'. The term 'unique examiners' were not described in detail. There is every possibility of observer variability and bias in such studies involving mere observation. In such cases, it is very important to mention how many observers took part in the study and how the errors were marginalized. It is very difficult to interpret any suture with naked eye examination.

In one of our earlier studies, we subjected human dried bones to X-ray to detect the sutures.² We also introduced a new innovative method of transillumination to detect the asterion and other sutures of the human skull.³ A recent study clearly stated that computed tomography may be used effectively to visualize the spheno-occipital synchondrosis because of the superior image quality and the accuracy involved in detecting the closure.⁴ Sometimes, artefacts on the surface of the skull may be misleading. These artefacts may be due to impression of a meningeal vessel or the presence of any anomalous sutural bone. All sutures can be distinguished from a fracture only by imaging procedures. This is the golden rule followed everywhere. Accuracy is needed for interpreting degree of fusion of sutures. Hence, simple naked eye examination may not be the accurate method and the results could be debated.

According to the authors mere observation of the closure degree of one suture i.e. spheno-occipital suture allows in predicting the age of the deceased which cannot be relied upon. Even some other skeletal and dental age markers have been reported to exhibit numerous variations.⁴ Thus, the results should not highlight the

fact that age can be predicted accurately rather it should describe as an important exclusion criterion for a particular age as described by previous authors.¹

Closure of sutures is related to race, nutrition status and bone growth. Sometimes, it may be important to relate it to the deceased individual's health status. Overall, an interesting article with good scientific facts presented by the authors. We applaud the editorial team for publishing such important articles.

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Conflict of interest

None.

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